

[Binder and softener replacement]**Product attributes:**

- SIZOL AQ is a homogeneous chemically modified starch for partially replacing additives used for spun yarn sizing. The product has excellent adhesion to polyester, cotton and viscose fibers. This adhesive power is brought in with less than 0.5% synthetic polymers, which makes the product bio-eliminable.
- SIZOL AQ gives better bonding, excellent lubricity, flexibility and abrasion resistance making it an ideal one-component additive for replacement of binders and lubricants in spun yarn sizing.
- SIZOL AQ is designed especially for weaving light to medium sorts on any type of high speed looms due to
 - ✓ Lower viscosity even at higher solids.
 - ✓ Very flexible film on the yarn.
 - ✓ Excellent abrasion resistance.
 - ✓ Very good pliability reduces percentage elongation at break.

Specifications:

Appearance	:	White powder
Solid content	:	93 ± 2%
Viscosity @ 14% conc. /90°C	:	18 – 26 sec (Zhan cup no.:4)

Application guidelines:

- This product is an ideal one-component additive replacement for cost reduction. Adjust final solid by raw / unmodified starch.
- For hairiness control in cotton sorts, it is recommended to add Zydex 2300 / Zydex 2301 (1-2% of total starch) to Sizol AQ.
- For PC sorts, it is recommended to use Zydex 2300 / Zydex 2301 (1-2% of total starch) and Zydex 2304 / Zydex 2400 (6-10% of total starch) with Sizol AQ for better binding and hairiness control.

Recipe selection guide:

BLENDING RATIO (STARCH: SIZOL AQ)	COUNT / REED PICK
70 : 30	Coarse count and low reed pick
50 : 50	Coarse/Medium count and high reed pick
30 : 70	Medium, Fine, Superfine counts and high reed pick

Solution making guidelines:

- Product characteristics: Sizol AQ almost eliminates dusting and gives very good wetting property.
- Standard cooker (open / closed) normally available can be used for preparing size with Sizol AQ.

Solution making procedure:

- Take total water used in the recipe.
- Add Sizol AQ and starch with stirring. Then add additives, if any.
- Start heating after 5-10 min and bring the temperature close to 90-95^o C in open vessel and 130^o C / 35 psi in closed vessel.
- Maintain above temperature for 45 to 60 min in open vessel and 30 min in closed vessel.
- The cooked size solution should be maintained at 85–90°C in storage vessel with indirect heating. Concentration should be monitored by refract meter for routine control along with viscosity cup for maintaining % concentration and viscosity at a given temperature.

Desizing procedure:

Desizing of this compound is relatively easy. Standard enzyme technique can be followed for complete removal. Use Zycowet as a wetting cum suspending agent with normal enzyme for good desizability.

Complimentary products:

- **ZYDEX 2300 / Zydex 2301:** Acrylic polymer dispersion binder for hairiness control.
- **ZYDEX 2304 / Zydex 2400:** Specialty polyester resin for abrasion resistance and flexibility.
- **ZYDEX 4502:** Odor free, waxy softener for improved lubricity, bonding and desizability.

Storage:

- Do not store Sizol AQ bags above 50°C or in direct sun.
- Stable for 12 months if stored in a shade at room temperature.

Disclaimer:

The information & data contained herein are given in good faith but without warranty. We recommend that before using our products, the customer should make his/her own tests to determine the suitability of the products for his/her own purpose under his/her operating conditions. As the circumstances under which our products are stored, handled and used are beyond our control, we cannot assume any responsibility for their use by the customers.

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